

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,928,224 B2
APPLICATION NO. : 10/587467
DATED : April 19, 2011
INVENTOR(S) : Maruoka

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 40, Delete Lines 63-37 "and n is an integer from 1 to 12);

(xii) $-(\text{CH}_2)_n-\text{S}-\text{R}^{12}$ (where R^{12} is a group selected from the group consisting of:

- (1) a hydrogen atom;
- (2) a C_1 to C_4 alkyl group that may be branched;"

Column 41, Delete Lines 1-46 "(3) an aryl group, wherein the aryl group may be substituted with at least one group selected from the group consisting of:

a C_1 to C_4 alkyl group that may be branched,

a C_1 to C_5 alkoxy group that may be branched,

an aryl group that may be substituted with a C_1 to C_4 alkyl group that may be branched, a cyano group, $-\text{NR}^{20}\text{R}^{21}$ (where R^{20} and R^{21} are each independently a hydrogen atom or a C_1 to C_4 alkyl group), a nitro group, a carbamoyl group, an $\text{N}-(\text{C}_1$ to C_4 alkyl)carbamoyl group, an

$\text{N},\text{N}-\text{di}(\text{C}_1$ to C_4 alkyl)carbamoyl group, or $-\text{NHCOR}^0$ (where R^0 is a C_1 to C_4 alkyl group that may be branched),

a cyano group,

$-\text{NR}^{20}\text{R}^{21}$ (where R^{20} and R^{21} are each independently a hydrogen atom or a C_1 to C_4 alkyl group),

a nitro group,

a carbamoyl group,

an $\text{N}-(\text{C}_1$ to C_4 alkyl)carbamoyl group,

an $\text{N},\text{N}-\text{di}(\text{C}_1$ to C_4 alkyl)carbamoyl group,

$-\text{NHCOR}^0$ (where R^0 is a C_1 to C_4 alkyl group that may be branched), and

a halogen atom; and

(4) a heteroaryl group, wherein the heteroaryl group may be substituted with at least one group selected from the group consisting of:

a C_1 to C_4 alkyl group that may be branched,

a C_1 to C_6 alkoxy group that may be branched,

This certificate supersedes the Certificate of Correction issued October 4, 2011.

Signed and Sealed this
Tenth Day of January, 2012



David J. Kappos
Director of the United States Patent and Trademark Office

CERTIFICATE OF CORRECTION (continued)
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an aryl group that may be substituted with a C₁ to C₄ alkyl group that may be branched, a cyano group, -NR²⁰R²¹ (where R²⁰ and R²¹ are each independently a hydrogen atom or a C₁ to C₄ alkyl group), a nitro group, a carbamoyl group, an N-(C₁ to C₄ alkyl)carbamoyl group, an N,N-di(C₁ to C₄ alkyl)carbamoyl group, or -NHCOR⁰ (where R⁰ is a C₁ to C₄ alkyl group that may be branched),

a cyano group,

-NR²⁰R²¹ (where R²⁰ and R²¹ are each independently a hydrogen atom or a C₁ to C₄ alkyl group),

a nitro group,

a carbamoyl group,

an N-(C₁ to C₄ alkyl)carbamoyl group,

an N,N-di(C₁ to C₄ alkyl)carbamoyl group,

-NHCOR⁰ (where R⁰ is a C₁ to C₄ alkyl group that may be branched), and

a halogen atom;"

Column 97, Line 49, Delete "Pd(OAc)₂" and replace with "Pd(PAc)₂"

Column 152, Line 14, Delete "17%ee" and replace with "-17%ee"

Column 173, Line 42, Delete "K" so Line 42 reads "-NR²⁰R²¹ (where R²⁰ and R²¹ are each independently a)"

Column 173, Line 51, Delete "000NR¹⁰re^{rsil}" (where R¹⁰, and replace with "OCONR¹⁰R¹¹ (where R¹⁰,

Column 177, Line 59, Delete "K" so Line 59 reads "-NR²⁰R²¹ (where R²⁰ and R²¹ are each indepen-"

Column 181, Line 29, Delete "R¹" so Line 29 reads "and x is an integer from 1 to 12); or R⁷ and R⁸ are taken"